Conclusions: On account of old age and some of them had given up aggressive treatments, antimicrobial adjustment by IDs' recommendation showed only marginal effects against fatality. Under such circumstances, it should be more prudent to prescribe antibiotics.

OS 10-2

THE ANTIMICROBIAL STEWARDSHIP PROGRAMMES REDUCE MULTIDRUG RESISTANT *ACINETOBACTER BAUMANNII* INFECTION IN THE INTENSIVE CARE UNIT (ICU) OF SILOAM HOSPITAL, TANGERANG, INDONESIA

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Purpose: Multidrug resistant *Acinetobacter baumannii* is one of the most common cause of hospital acquired infection (HAIs) in intensive care units (ICUs) worldwide and commonly associated with increasing mortality and length of stay. To address with the increasing of multi-drug resistant *A.baumannii* infection, antimicrobial stewardship programmes are promoted worldwide to encourage judicious antimicrobial use and prevent the emergence of resistance. The aim of this study is to determine the impact of the antimicrobial stewardship programmes in preventing the development of *A. baumannii* antimicrobial resistance.
Methods: During the period from June 2012 till June 2013, *A. baumanii* isolates data from sputum, wound, blood, urine, and cerebro-spinal fluid were collected and used as a baseline data. The identification of *A.baumannii* and resistant pattern was performed by using VITEX 2 Compact® according to Clinical Laboratory and Standards Institute (CLSI). Socialization and implementation of the antimicrobial stewardship programmes including; (1) determining the empirical antimicrobial drug use in the ICU, (2) using the antibiotic prescription chart to ensure antibiotic prescription based on microbiological culture and sensitivity.
Results: From the baseline data, *A baumannii* found in 16 isolates and were multidrug resistant. The majority of the isolates sensitive to colistin (100%) and cefoporazone/sulbactame (77%). After the implementation of antimicrobial stewardship programmes, the incidence of *A.baumannii* finding was decreasing into 3 isolates and showed the increasing sensitivity to cefoporazone/sulbactame (89%) that use as empirical therapy for gram negative bacteria infection in the ICU. The sensitivity to the other antimicrobial; carbapenem, imipenem, meropenem, aminoglycoside were also increasing.
Conclusions: Our result of the antimicrobial stewardship programmes showed the improvement *A.baumannii* sensitivity to the first-line antimicrobials. To have the antimicrobial stewardship programmes helped us to decrease the rate of bacterial resistance within our hospital.

OS 10-3

EVALUATION OF LEVOFLOXACIN UTILIZATION RATIONALITY BY COMPUTERIZED PHYSICIAN ORDER ENTRY SYSTEM

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Purpose: Levofloxacin belongs to the third-generation Fluoroquinolones (FQs). It is not only the broad-spectrum antibiotic for G (+) and G (−) (*Escherichia coli, Klebsiella pneumonia, Pseudomonas aeruginosa*) but also more activity to the atypical bacteria (*Chlamydia, Mycoplasma*). In this retrospective study, we evaluated the converting ratio between injection and oral forms. This drug utilizing evaluation (DUE) study will help to elevate the reasonable using of levofloxacin in the hospital.
Methods: This study is a retrospective study in a regional hospital. Cases were collected from April 2014 to June 2014 for all hospitalized patients using Levofloxacin. The reasonableness assessment of Levofloxacin prescribing included indications, doses, bacterial culture or consulted with Infectious Diseases physician. The recommendation doses for renal dysfunction followed by SANFORD GUIDE. Patient's creatinine clearance (Clcr) was monitoring for adjusting the therapeutic dose accordingly. Descriptive statistical analysis was performed in the study.
Results: Total 158 cases were recruited in the study. The bacterial culture was performed in 157 cases (99.4%). Depending on bacterial culture results, considering as reasonable using levofloxacin was 86 cases (54.4%), and empirical therapy counted as 61 (38.6%), which were also consulted with Infectious Diseases physician prior to administration. In addition, 158 cases (100%) were monitored Clcr, 143 cases (90.5%) had performed dose adjustments in accordance with appropriate therapeutic doses by renal function. Moreover, 23 cases used injection form over 7 days during hospitalization period, 3 cases (13.0%) switched to oral form during hospitalization period, 12 cases (52.2%) did not switch during hospitalization period, 8 cases of them (8/23, 34.8%) did not switch during hospitalization period but took home with oral levofloxacin.
Conclusion: This study showed that the reasonableness of the use of Levofloxacin was counted as 86 cases (54.4%). The ratio of injection dosage form converted to oral form was not ideally. The results will provide physicians to use the build-in computerized physician order entry system reminding to improve the efficacy of levofloxacin.

OS 10-4

EVALUATION OF PIPERACILLIN/TAZOBACTAM UTILIZATION APPROPRIATENESS

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Purposes: The aim of this study was to evaluate the appropriateness of piperacillin/ tazobactam (Tapimycin®; YUNGSHIN, Taichung, TW) usage in a regional hospital, retrospectively.
Methods: This retrospective study was designed to recurit all patients admitted to the regional hospital with prescribing Tapimycin® from October, 2013 to December, 2013. The electronic medical records were reviewed and studied, respectively. We collected patient's data including demographics, empirical indication, infusion time, dose and dosing interval, culture and susceptible results, concomitant antibiotics, and de-escalation of the antimicrobial regimen. The endpoint of overall appropriateness was evaluated and dose adjustment following renal function monitoring by creatinine clearance (Clcr) calculated by Cockcroft-Gault Equation.
Results: During this period, 181 cases, 112 female cases and 69 male cases were obtained from 159 patients. The average age of the cases was 67.4 ± 16.59. The average administration day was 10.01 ± 4.25. The main indication for initiation administration was pneumonia (109/181; 60%). There were 41 (41/360, 11.39%) isolations as *Pseudomonas aeruginosa*; 35 (35/360, 9.72%) were *Klebsiella pneumoniae;* 21 (21/360, 5.83%) were *Escherichia coli*. Thirty-seven (20.44%) cases infusion time were longer than 60 min. There were 111 cases (61.33%) with normal renal function. Renal dysfunction with dosage adjustment was counted as 51 cases (28.18%). However, there were 13 cases (7.18%) with renal dysfunction without dose or dosing interval adjustment. At the endpoint of evaluation, 72 cases (40%) where antibiotics were changed to narrow-spectrum antimicrobials or oral antibiotics were considered as de-escalation. The overall rate of appropriateness of Tapimycin® therapy was 138/181 (76%).
Conclusion: Our results present the tendency toward the appropriate rate of Tapimycin® utilization at our institution was only 76%, especially, when the selection of treatment based on initial empirical therapy was inappropriate. Without dosing adjustment was given the concerns about the increasing occurrence of antibiotic adverse events. Further studies may be performed to establish guidance ideally in the future.

OS 10-5

ASSOCIATION BETWEEN ANTIMICROBIAL TREATMENT WITH FLUOROQUINOLONES VERSUS β-LACTAMASE INHIBITOR AND RISK OF PNEUMONIA-RELATED HOSPITALIZATION AMONG PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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